Design an "Environmentally Friendly" Anchor

WHY?

The Monterey Bay National Marine Sanctuary (MBNMS) and the Monterey Bay Aquarium Research Institute (MBARI) are concerned about the growing number of anchors used for mooring scientific equipment and other uses that have been purposefully abandoned in our Sanctuary because they were not practically retrievable. The limit on retrievability is set by both the static and dynamic loads that can be safely accommodated by the winch on the research vessel Point Sur, the largest vessel available in this region for deploying equipment to and lifting it from the seafloor. Therefore, MBNMS and MBARI are jointly sponsoring a design competition to encourage the submission of ideas for more "environmentally friendly" anchors.

MBNMS is offering up \$800 in prize money to be awarded for the winning design(s), and MBARI will complete the engineering and technical work to turn the winning idea(s) into implementable anchors. We envision that the designs will consist of disposable anchors that have minimal environmental impact, easily reused anchors, or some combination of the two (i.e., some portion disposable and some recovered). There is a need for anchors that can both be reused in the same location as original deployment and for those that can be reused elsewhere.

WHAT IS THE BEST SOLUTION?

The ideal solution should provide the equivalent anchor performance as a 400-1,000 lbs. iron weight on the seafloor. The designs will be judged on the basis of their suitability as an anchor, effect on the environment, cost to implement, and cost to recover (if applicable). Designers should also include an explanation of why their design is environmentally friendly. In case of duplicate submissions of the same idea, the prize will go to the first entry received. Entries will be judged by a team of MBNMS and MBARI personnel. The MBNMS will award \$400 to the reusable design and \$400 to the disposable design chosen by the review team (a winning combination design will be allocated to one of the two categories).

HOW TO SUBMIT AN IDEA:

Design ideas and questions should be submitted to Mandy Allen, Monterey Bay Aquarium Research Institute, 7700 Sandholdt Road, Moss Landing, CA 95039 or mandy@mbari.org. Also visit www.mbari.org/mars/anchor_competition.html for more information.

Deadline for submission of entries is May 1, 2005.





